

## MODEL 520SP — 20" CUT, SELF-PROPELLED MULCHING MOWER

Mfg. No.	Description
1692318	Model 520SP, 5Hp, 20" Cut Mulching Mower, Self Propelled

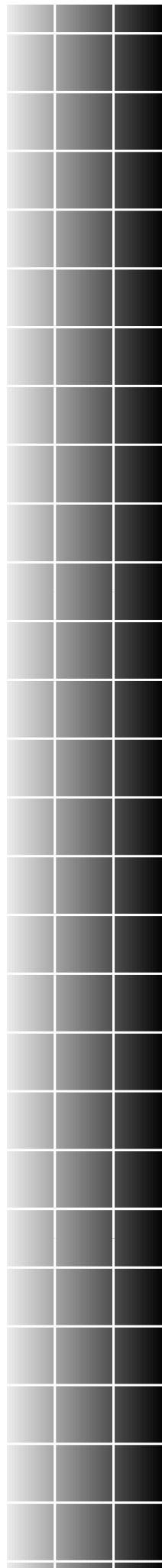


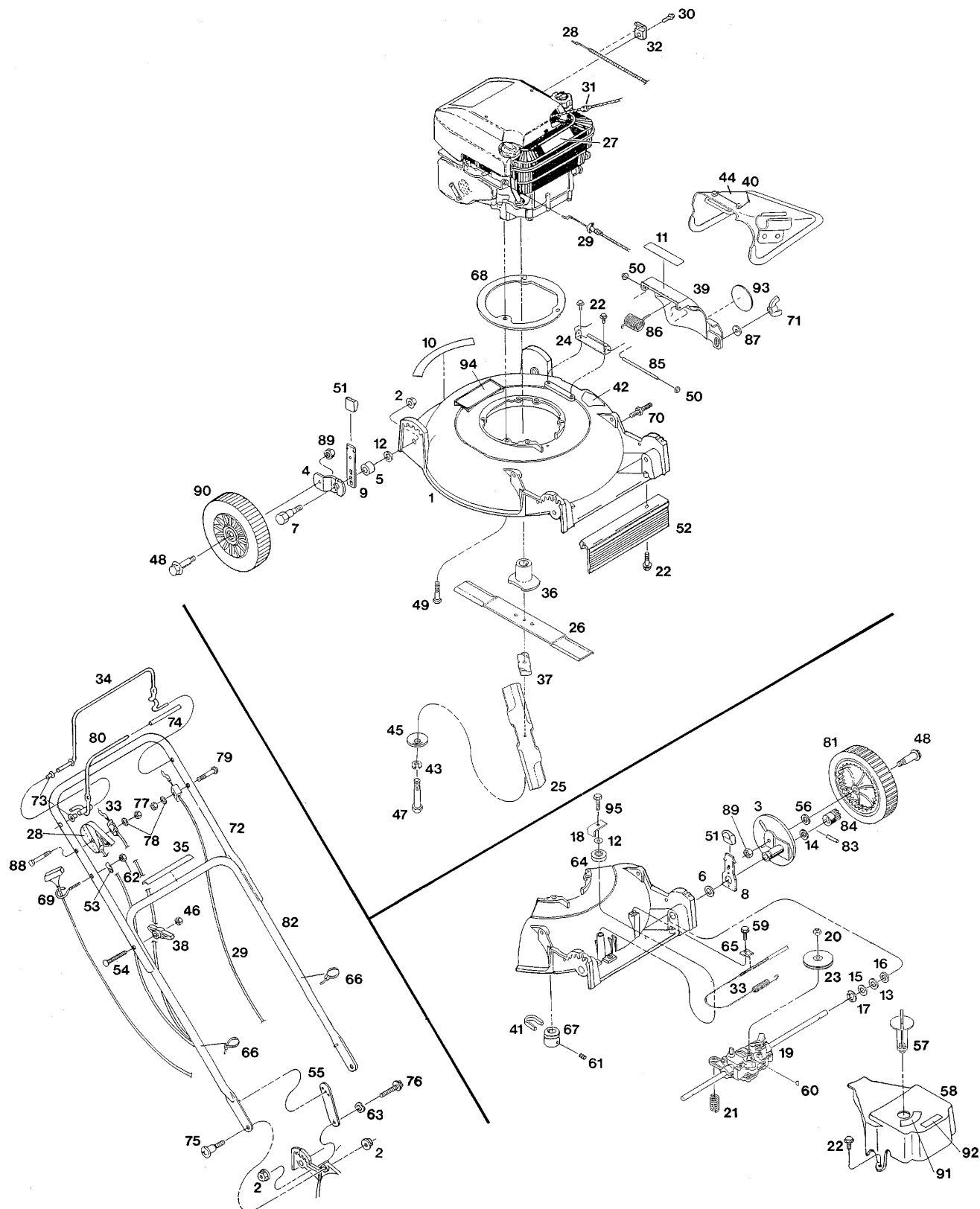
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MANUFACTURING, INC.

500 N Spring Street / PO Box 997  
Port Washington, WI 53074-0997 USA

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The above parts group applies to the following Mfg. Nos.:

1692318 5HP, 20" Cut Mulching Mower, SP

## All Components

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	1713127	Deck - 20" orange 3 spd.	48	1713139	Bolt - wheel
2	1935048	Nut - 5/16-18 flg. lock	49	1921971	Bolt - 3/8-16 x 1-3/4" HHCS Gr. 5
3	1713128	Drive wheel support ass'y - blk	50	1960126	Nut - 1/4 push-on
4	1713102	Wheel arm - blk	51	1612215	Plastic tip - height adjuster
5	1612225	Spacer - front hgt. adj.	52	1706215	Trailing shield - plastic
6	1612228	Spacer - rear hgt. adj.	53	1677890	Washer
7	1612235	Bolt - height adjuster	54	1960273	Bolt - handle
8	1713129	Setting lever assy L.H. rear	55	1706236	Handle support
8	1713130	Setting lever assy R.H. rear	56	1612242	Washer - 3/8" flat
9	1713104	Setting lever assy. R.H. front	57	1713140	Shift knob - plastic
9	1713103	Setting lever assy. L.H. front	58	1713141	Drive cover 3 spd.
10	1713119	Decal - logo 20"	59	1925003	Screw - 1/4-20 x 1/2" hex hd. tap
11	1713118	Decal - danger mulch cover	60	1713142	Key - transmission
12	1917642	Washer - 5/16" flat	61	1706219	Set screw 1/4-20 x 3/8"
13	1612214	Washer- shim	62	1920397	Nut - 1/4-20 lock
14	1612222	Washer- 9/16" flat	63	1706237	Washer - 5/16" wave
15	173668	Washer- 9/16" flat	64	1713143	Pulley - 11/4" dia.
16	1612286	Washer - 9/16" wave	65	1612326	Clamp - drive cable
17	1612288	E-ring	66	1612352	Cable tie
18	1713131	Retainer bracket	67	1713552	Drive pulley
19	1713132	Transmission - 3 spd.	67*	1706218	Drive pulley
20	1713133	Nut- 10mm lock	68	1612410	Engine ring - red
21	1713134	Spring - compression	69	1612366	Eyebolt - 1/4-20
22	1925592	Screw - 1/4-20 x 3/4" hex hd. tap	70	1612387	Stud - 1/4-20 x 3/4"
23	1713135	Pulley - transmission	71	960293	Wing nut- 1/4-20 nylon insert
24	1713105	Bracket- hinge	72	1713120	Handle - upper
25	1713106	Blade - 20"	73	1713144	Bushing - drive bail
26	1713107	Blade - recut 20"	74	1713145	Sleeve - drive bail
27	1713108	Decal - blade warning	75	1713121	Bolt - handle mtg.
28	1713109	Control - throttle w/cable	76	1713122	Bolt - handle supt.
29	1713110	Cable - engine/blade control	77	1916622	Nut - 1/4-20 hex
30	1664068	Screw - #10-16 x 5/8" tap	78	921880	Washer- 1/4" star
31	1677809	Rope stop	79	6041612	Screw - 1/4-20 x 1-1/2" truss hd.
32	1713116	Cable clamp	80	1713146	Bail - ground drive control
33	1713136	Cable - traction control	81	1612398	Wheel - 8" power propelled
34	1713137	Bail - engine/blade control	82	1706234	Handle - lower
35	1713126	Decal - starting instructions	83	1713147	Drive pin
36	1713551	Adapter- blade	84	1713148	Pinion R.H. 3 spd.
36*	1713111	Adapter - blade	84	1713149	Pinion L.H. 3 spd.
37	1713112	Spacer- blade	85	1713124	Rod hinge
38	1713113	Wing nut - plastic	86	1713125	Spring - mulch cover
39	1713114	Cover- mulch 20"	87	1921319	Washer- 1/4" flat
40	1713115	Chute deflector assembly	88	1923282	Bolt - 1/4-20 x 2-1/2" HHCS
41	1713138	V-belt	89	1917421	Nut - 3/8-16 jam lock
42	1677973	Decal - CPSC danger	90	1706203	Wheel - 8"
43	1916965	Washer- 3/8" lock H.D.	91	1713150	Decal - 3 spd. shift inst.
44	1713156	Decal - CPSC Danger	92	1713151	Decal - 3 spd. belt cover
45	1677816	Washer - 3/8" conical	93	1713152	Decal - 3 in 1
46	1917372	Nut - 5/16-18 hex	94	1713153	Decal - convertible mulcher
47	1713117	Bolt - 3/8-24 x 3-1/2" HHCS Gr. 8	95	1929783	Screw - 1/4-20 x 1" hex hd. tap

### Footnotes:

\*Prior to Serial No. 1400

Parts are Left or Right Hand as viewed from their operator position.

Specifications are subject to change without prior notice.

The above parts group applies to the following Mfg. Nos.:

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# Hardware Identification & Torque Specifications

## Common Hardware Types

Hex Head Capscrew



Washer



Carriage Bolt



Lockwasher



Hex Nut

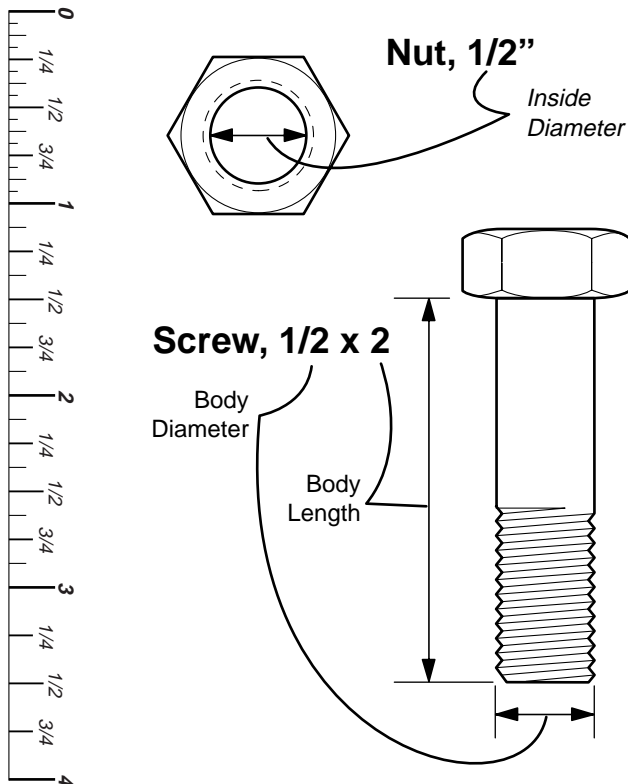


## Standard Hardware Sizing

When a washer or nut is identified as **1/2"**, this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch; if a second number is present it represents the *threads per inch*

When bolt or capscrew is identified as **1/2 - 16 x 2"**, this means the *Nominal size*, or *body diameter* is 1/2 inch; the second number represents the *threads per inch* (16 in this example, and the final number is the *body length* of the bolt or screw (in this example 2 inches long).

**The guides and ruler furnished below are designed to help you select the appropriate hardware and tools.**



## Torque Specification Chart

FOR STANDARD MACHINE HARDWARE (Tolerance  $\pm 20\%$ )

Hardware Grade	No Marks SAE Grade 2		SAE Grade 5		SAE Grade 8	
	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.
8-32	19	2.1	30	3.4	41	4.6
8-36	20	2.3	31	3.5	43	4.9
10-24	27	3.1	43	4.9	60	6.8
10-32	31	3.5	49	5.5	68	7.7
1/4-20	66	7.6	8	10.9	12	16.3
1/4-28	76	8.6	10	13.6	14	19.0
5/16-18	11	15.0	17	23.1	25	34.0
5/16-24	12	16.3	19	25.8	27	34.0
3/8-16	20	27.2	30	40.8	45	61.2
3/8-24	23	31.3	35	47.6	50	68.0
7/16-14	30	40.8	50	68.0	70	95.2
7/16-20	35	47.6	55	74.8	80	108.8
1/2-13	50	68.0	75	102.0	110	149.6
1/2-20	55	74.8	90	122.4	120	163.2
9/16-12	65	88.4	110	149.6	150	204.0
9/16-18	75	102.0	120	163.2	170	231.2
5/8-11	90	122.4	150	204.0	220	299.2
5/8-18	100	136	180	244.8	240	326.4
3/4-10	160	217.6	260	353.6	386	525.0
3/4-16	180	244.8	300	408.0	420	571.2
7/8-9	140	190.4	400	544.0	600	816.0
7/8-14	155	210.8	440	598.4	660	897.6
1-8	220	299.2	580	788.8	900	1,244.0
1-12	240	326.4	640	870.4	1,000	1,360.0

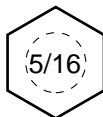
### NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
  - for prevailing torque locknuts - use 65% of grade 5 torques.
  - for flange whizlock nuts and screws - use 135% of grade 5 torques.
- Unless otherwise noted on assembly drawings, all torque values must meet this specification.

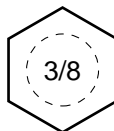
## Wrench & Fastener Size Guide



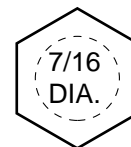
**1/4" Bolt or Nut**  
Wrench—7/16"



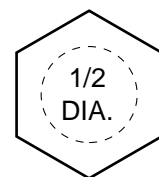
**5/16" Bolt or Nut**  
Wrench—1/2"



**3/8" Bolt or Nut**  
Wrench—9/16"



**7/16" Bolt or Nut**  
Wrench (Bolt)—5/8"  
Wrench (Nut)—11/16"



**1/2" Bolt or Nut**  
Wrench—3/4"